

<b>NWS FORM E-5</b> (11-88) (PRES. BY WSOM E-41)	<b>U.S. DEPARTMENT OF COMMERCE</b> NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA)  <b>WFO Jackson, Mississippi</b>
<b>MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS</b>		REPORT FOR: MONTH      YEAR <b>September      2003</b>
TO:      Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE <b>Alan Gerard, MIC</b> In Charge of HSA  DATE <b>October 8th , 2003</b>

*When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41)*

### Synopsis...

*Weather conditions were fairly typical for September. The month began with warm and humid conditions and ended with cooler and drier air.*

*From the 1<sup>st</sup> to 4<sup>th</sup>, a cold front slowly approached the HSA from the north. A strong southerly inflow from the Gulf of Mexico ahead of the front helped produce showers and thunderstorms over the area. Rainfall amounts were heaviest over northwest sections of the HSA. Rainfall over the period ranged from .50 to around 3 inches. Some heavier amounts 24 hour totals during this period were at Newport, MS 2.57 inches (2<sup>nd</sup>) and at Pickens, MS 3.22 inches (2<sup>nd</sup>). The cold front finally pushed through the area late on the 4<sup>th</sup> into the 5<sup>th</sup>.*

*From the 6<sup>th</sup> into 9<sup>th</sup>, high pressure dominated with the exception of showers on the 7<sup>th</sup> from wrap around rainfall over east and southeast Mississippi from Tropical Storm Henri moving over the Florida peninsula.*

*From the 10<sup>th</sup> to the 14<sup>th</sup>, a strong upper level system coupled with an approaching cold front in the southern plains caused scattered showers and thunderstorms over northeast LA, southeast AR and extreme western sections of Mississippi. Rainfall amounts were around 1 inch or less over this area. As the cold front moved through the remainder of the area on the 14<sup>th</sup>, rainfall amounts around 1 inch or less were also reported.*

*From the 15<sup>th</sup> to 18<sup>th</sup>, high pressure dominated the HSA, giving very nice weather.*

*From the 19<sup>th</sup> to 22<sup>nd</sup>, a surface low in the northwestern Gulf, an upper-level trough, an approaching cold front from the southern plains, and moist unstable air combined to bring showers and thunderstorms to most areas of the HSA. From late on the 20<sup>th</sup> into the 21<sup>st</sup>, the Gulf low drifted north and merged with the cold front. Rainfall amounts ranged from .75 to 3.25 inches. Some heavier 24 hours totals were at Oakley Experimental Station in Hinds County MS 3.27 inches (21<sup>st</sup>); Grenada 5NNE, MS 3.16 (21<sup>st</sup>); Pat Harrison Waterway's Archusa Waterpark, MS 3.00 inches (21<sup>st</sup>); Lexington, MS 2.60 inches (21<sup>st</sup>); Moorhead, MS 2.56 inches (21<sup>st</sup>) and at Eudora, AR 2.52 inches (21<sup>st</sup>).*

As the cold front swept through the area early on the 22<sup>nd</sup>, high pressure began to build into the area giving nice weather through the 25<sup>th</sup>. Late on the 25<sup>th</sup>, another cold front advanced into northwest sections of the HSA and stalled. Scattered showers were noted in the east. From the 27<sup>th</sup> into the 28<sup>th</sup>, yet another cold front advanced through the HSA bringing with it widely scattered showers. Rainfall amounts were less than .25 inch with a few isolated areas around .50 inches. As the cold front pushed off of the coast on the 28<sup>th</sup>, high pressure began to move into the HSA. Cool and drier air prevailed through the remainder of the month.

### **River and Soil Conditions...**

The soils continued to dry out over the month of September. Soil moisture conditions continued to be much above normal, especially over eastern sections of Mississippi. Western sections of the state remained near normal. Southeast Arkansas and Northeast Louisiana also continued to remain near normal.

No flooding was reported over any of the river systems in the HSA during the month. Most of the rivers were at or approaching base flow conditions. A few rivers observed minor rises during the month.

With normal soil conditions over northeast LA and southeast AR and slightly above normal rainfall forecast for the next 60 to 90 days, flood potential for the rivers in these areas will be slightly above normal, especially for late November into December. With slightly above to much above normal soil conditions over the remainder of the HSA and near normal rainfall forecast for the next 60 to 90 days, flood potential for the remainder of the HSA should remain slightly above normal.

### **Rainfall for the month of September...**

<u>RIVER BASIN</u>	<u>RAINFALL</u>	<u>DEPARTURE FROM NORMS</u>
Southeast Arkansas (Chicot & Ashley counties)	4.25 to 4.75 inches	Above normal.
Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)	2.00 to 4.00 inches northern sections	Slightly below to slightly above normal.
	2.00 to 4.00 inches central sections	Slightly below to slightly above normal.
	2.00 to 4.50 inches southern section	Slightly below to slightly above normal.
Lower Yazoo	3.50 to 5.50 inches	Normal to much above normal.

<i>Big Black</i>	<i>2.00 to 5.75 inches upper basin</i>	<i>Below to much above normal.</i>
	<i>3.00 to 7.00 inches middle basin</i>	<i>Normal to much above normal.</i>
	<i>3.50 to 4.75 inches lower basin</i>	<i>Slightly above to much above normal.</i>
<i>Homochitto/ Bayou Pierre</i>	<i>2.50 to 5.50 inches</i>	<i>Below normal over the Bayou Pierre basin to above normal over the Homochitto basin.</i>
<i>Pearl (abv Jackson)</i>	<i>1.75 to 3.50 inches</i>	<i>Below to near normal.</i>
<i>Pearl (Blo Jackson)</i>	<i>2.50 to 4.25 inches</i>	<i>Below normal to slightly above normal.</i>
<i>Pascagoula</i>	<i>2.25 to 4.25 inches over the Leaf basin.</i>	<i>Below normal to near normal.</i>
	<i>4.00 to 5.00 inches over the Black Creek basin.</i>	<i>Near normal to slightly above normal</i>
	<i>2.00 to 5.00 inches over the Chickasawhay</i>	<i>Below normal to slightly above normal.</i>
<i>Tombigbee tributaries in the JAN HSA</i>	<i>2.50 to 4.25 inches</i>	<i>Below to slightly above normal.</i>

*The heaviest rainfall amounts in the HSA for the month were: 7.29 inches at Pickens, MS; 5.77 inches at Vaiden, MS; 5.54 inches at Hazelhurst, MS; 5.41 inches at Lexington, MS; 5.17 inches at Union Church, MS; 5.10 inches at Quitman, MS; 4.94 inches at Stoneville Agricultural Center, MS; 4.94 inches at Purvis, MS.*

*Here at the Jackson WFO, the September monthly rainfall was 2.61 inches, which was 0.62 inches below normal. We had received 46.74 inches of rainfall through the end of September which was 4.59 inches above normal.*

*At the Meridian Key Field, the September monthly rainfall was 1.98 inches, which was 1.66 inches below normal. Meridian had received 56.80 inches through the end of September which was 11.69 inches above normal.*

### *Mississippi River...*

*The Mississippi River from Arkansas City to Natchez experienced a moderate rise from late in the first week until late in the second week of the month. The river crested and began to fall until several days before the end of the month. The river remained above seasonal norms for most of the month at Arkansas City and Greenville while Vicksburg and Natchez remained above seasonal norms for the entire month. The provisional high and low stages for September are listed below:*

<i>Location</i>	<i>High Stage(ft)</i>	<i>Date</i>	<i>Low Stage(ft)</i>	<i>Date</i>
<i>Arkansas City, AR</i>	<i>18.10</i>	<i>09/13</i>	<i>4.88</i>	<i>09/03</i>
<i>Greenville, MS</i>	<i>29.72</i>	<i>09/13</i>	<i>16.03</i>	<i>09/01</i>
<i>Vicksburg, MS</i>	<i>23.03</i>	<i>09/15</i>	<i>9.11</i>	<i>09/02</i>
<i>Natchez,MS</i>	<i>29.35</i>	<i>09/16</i>	<i>16.24</i>	<i>09/02</i>

*Products issued...*

*Total Flood Warning products issued: 1*

*Total Flood Statement products issued:1*

*Daily Rainfall Products (RRA'S) issued 30*

*Daily River Forecast Products (RVS'S) issued: 30*

*Daily River Stage products (RVA'S) issued 30*

*Marty V. Pope  
Service Hydrologist*

*Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas, N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District, Pat Harrison Waterway District, and the Mississippi Department of Environmental Quality.*

*cc: USGS Little Rock District  
USGS Ruston District  
USCE Mobile District  
USCE Vicksburg District  
USCE Mississippi Valley Division  
USGS Mississippi District  
SRH Climate, Weather and Water Division  
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